



12EG6

PENTAGRID AMPLIFIER

7-PIN MINIATURE TYPE

For use in automobile radio receivers operating directly
from 12-volt storage batteries

12EG6

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage range. 10 to 15.9 dc volts

This voltage range is on an absolute basis. For longest life, it is recommended that the heater be operated within the voltage range of 11 to 14 volts.

Current (Approx.)

at 12.6 volts. 0.15 amp

Direct Interelectrode Capacitances:^o

Grid No.3 to all other electrodes

except plate 6.5 $\mu\mu\text{f}$

Plate to all other electrodes. 12 $\mu\mu\text{f}$

Grid No.1 to all other electrodes

except plate 5.7 $\mu\mu\text{f}$

Grid No.3 to plate 0.25 max. $\mu\mu\text{f}$

Grid No.3 to grid No.1 0.15 max. $\mu\mu\text{f}$

Grid No.1 to plate 0.04 max. $\mu\mu\text{f}$

Grid No.1 to cathode & grid No.5 3.2 $\mu\mu\text{f}$

Cathode & grid No.5 to all other

electrodes except grid No.1. 23 $\mu\mu\text{f}$

Characteristics, Class A₁ Amplifier:

** With grid No.3 connected to grid No.1
through 100,000-ohm resistor*

Heater Voltage 12.6 volts

Plate Voltage. 12.6 volts

Grids No.2 & 4 (Screen-Grids) Voltage. . . 12.6 volts

Grid-No.1 (Control-Grid) Voltage:

Developed across 2.2-megohm resistor . . -0.6 volt

Plate Resistance (Approx.) 0.15 megohm

Transconductance, Grid No.3 to Plate . . . 800 μmhos

Plate Current. 0.55 ma

Grids-No.2 & 4 Current 2.8 ma

Grid-No.1 Voltage (Approx.) for grid-No.3-

to-plate transconductance of 20 μmhos . . -3 volts

Mechanical:

Operating Position Any

Maximum Overall Length 2-1/8"

Maximum Seated Length. 1-7/8"

Length, Base Seat to Bulb Top (Excluding tip). . 1-1/2" $\pm$ 3/32"

Diameter 0.650" to 0.750"

Dimensional Outline. See General Section

Bulb T5-1/2

^o: See next page.

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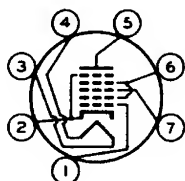


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Base. Small-Button Miniature 7-Pin (JETEC No.E7-1)
 Basing Designation for BOTTOM VIEW. 7CH

Pin 1-Grid No.1
 Pin 2-Cathode,
 Grid No.5
 Pin 3-Heater
 Pin 4-Heater



Pin 5-Plate
 Pin 6-Grid No.2,
 Grid No.4
 Pin 7-Grid No.3

AMPLIFIER — Class A₁

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE	16 max.	volts
GRID-No.3 (CONTROL-GRID) VOLTAGE:		
Negative-bias value	16 max.	volts
Positive-bias value	0 max.	volts
GRIDS-No.2 & 4 (SCREEN-GRIDS)		
SUPPLY VOLTAGE.	16 max.	volts
GRIDS-No.2 & 4 VOLTAGE.	16 max.	volts
CATHODE CURRENT	20 max.	ma
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode .	16 max.	volts
Heater positive with respect to cathode .	16 max.	volts

Maximum Circuit Values:

Grid-No.3-Circuit Resistance.	10 max.	megohms
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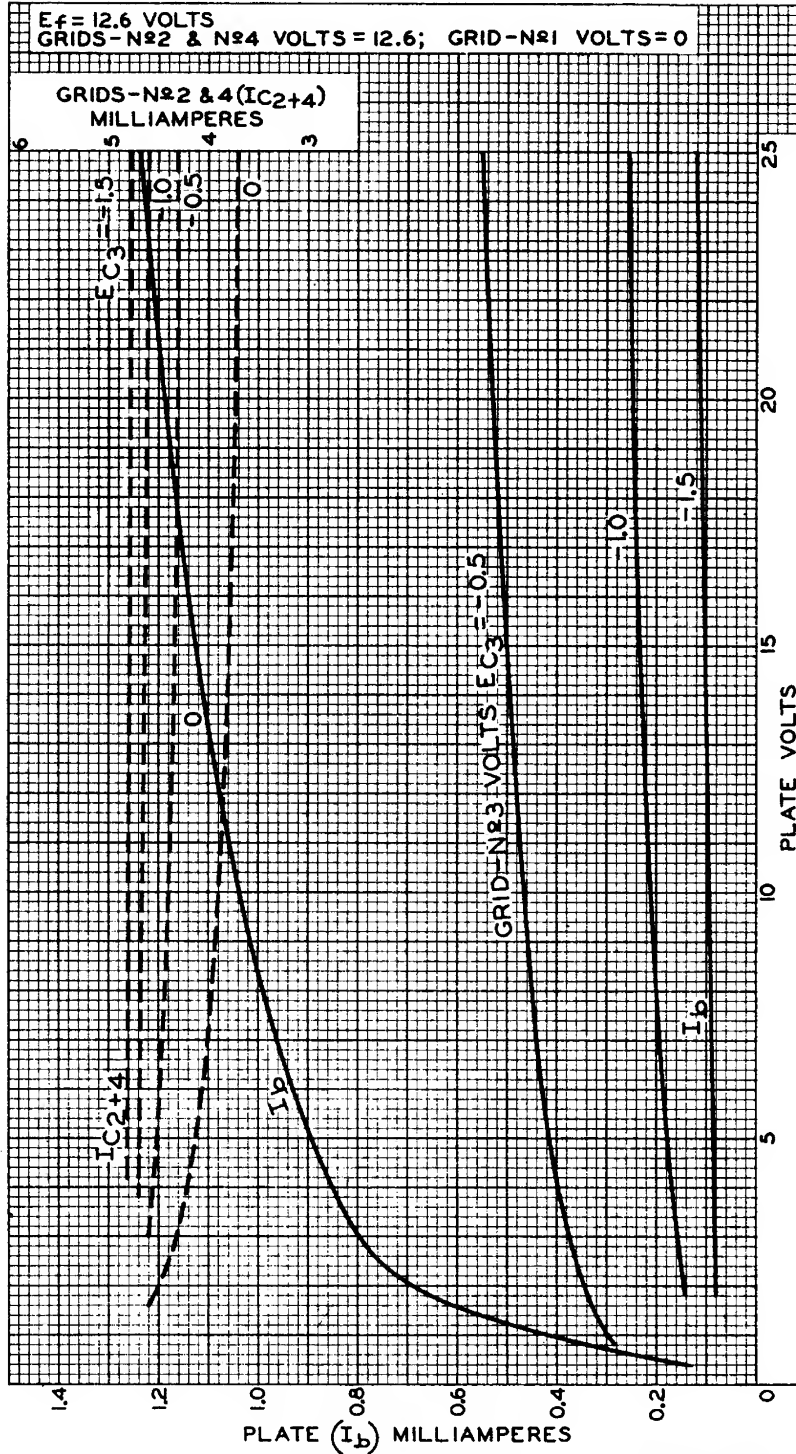
° With external shield JETEC No.316 connected to cathode.



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AVERAGE CHARACTERISTICS



ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

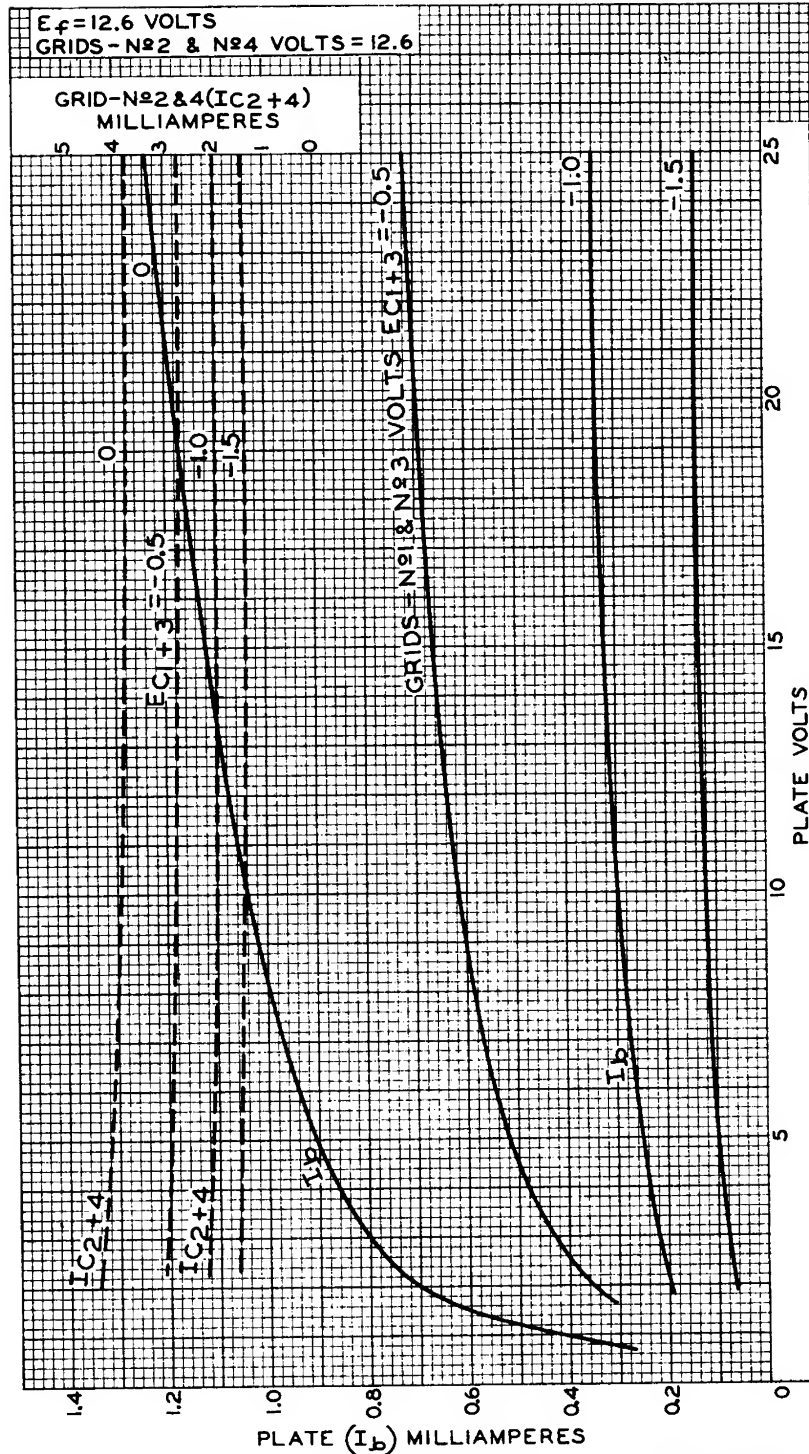
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